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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,192	08/15/2000	Ivan A. Cowie	28549-165559	1610
26694	7590	10/04/2005		EXAMINER
VENABLE LLP				TSE, YOUNG TOI
P.O. BOX 34385				ART UNIT
WASHINGTON, DC 20045-9998				PAPER NUMBER
			2637	

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/638,192	COWIE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	YOUNG T. TSE	2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 January 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,6-20,22-26,31-45 and 47-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,6-20,22-26,31-45 and 47-50 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 15-25, filed January 21, 2005, with respect to claims 1, 6-20, 22-26 and 31-36 have been fully considered and are persuasive. The rejection of 35 U.S.C. 101 and 103 has been withdrawn.

### ***Specification***

2. The disclosure is objected to because of the following informalities: page 10, line 24, delete the word "and", line 26, ". Should be ;". Appropriate correction is required.

### ***Claim Objections***

3. Claims 9-20, 23, 25-26, 31-45, and 47-50 are objected to because of the following informalities:

In claim 9, line 2, "indicate" should be "indicates" and line 9, the word "pulse" should be deleted.

The line 1 of both claims 15 and 16, "rule" should be "rule establishing". Also see line 2 of claims 40 and 41.

In claim 23 (line 2), claim 26 (line 8), claim 34 (line 9), the word "pulse" should be deleted.

In claim 34, line 2, the "indicate" should be "indicates".

Wherein the dependent claims 10-14, 17-20, 22, 24-25, 31-33, 35-39, 42-45, and 47-50 depend upon claims 1 and 26.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 6-20, 22-26, 31-45 and 47-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a method for defining one or more communication channels in an Ultra Wideband system in the preamble, however, the limitation is not recited in the body of the claim.

In claim 1, line 7, the phrase "a type" is not understood. Also see claim 26.

In claim 16, the phrase "a region bounded by a minimum and maximum value difference" is also not understood. Also see claim 41.

In claim 18, line 3, the phrase "the code element value" lacks antecedent basis (see claim 9, lines 1-2 and claim 17, lines 5-6). Also see claim 43.

Wherein the dependent claims 2-15, 17, 19-20, 22-25, 31-40, 42, 44-45 and 47-50 depend upon claims 1 and 26.

***Allowable Subject Matter***

6. Claims 1, 6-20, 22-26, 31-45 and 47-50 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to show or suggest the generation of one or more code having at least one or more code elements value representing at least one non-temporal characteristic of at least one Ultra Wideband waveform on the one or more communication channels of the Ultra Wideband system and the association of at least one code element value with the at least one non-temporal characteristic having an amplitude.

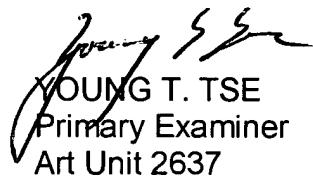
***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bi, Roberts et al. and Richards et al. are related to CDMA and ultra wideband transmitter and receiver comprising code generator for generating code sequences for the transmitter and receiver.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Thursday and alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The Central FAX Number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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